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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,488	02/11/2002	George Jyh-Shann Chou	17714 (MHM 13417US01)	6030

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Tyco Electronics Corporation
307 Constitution Drive
MS R20/2B
Menlo Park, CA 94025

EXAMINER	
WYSZOMIERSKI, GEORGE P	
ART UNIT	PAPER NUMBER
1742	

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,488

Applicant(s)

CHOU ET AL.

Examiner

George P. Wyszomierski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20050216.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-15,17,18 and 29-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,13,29,32,33 and 36 is/are rejected.
- 7) ☒ Claim(s) 4-12,14,15,17,18,30,31,34 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 13, 29, 32, 33 and 36 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Neuman (U.S. Patent 6,226,862). This is a new ground of rejection.

Column 5 of Neuman discloses a process which includes forming a plurality of electrical contact materials on a substrate which is relatively insensitive to inductive heating, and performing an induction heating step upon such a structure. With respect to instant claims 29 and 33, the drawing figures of Neuman appear to show the contacts aligned in a straight line, i.e. in a single plane consistent with what is presently claimed. With respect to instant claims 32 and 36, the portions of the Neuman contacts closest to and furthest from the substrate are held equivalent to the presently claimed "base portion" and "knee portion", respectively.

Neuman does not specifically state that one will heat "different first and second portions... by different first and second amounts" or "induction heating...by different first and second amounts" as required by instant claims 1 and 13 respectively. The examiner's position is that a differential treatment of various portions of a heated material is inherent in the

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prior art process, i.e. some portions of the material will inevitably be closer to the heat source than other portions and thus will receive a greater amount of heat than portions further from the heat source. The present amendment which adds the phrase "of each" to the instant claims does not change this analysis. Absent of any qualification of the word "different", any two points A and B of the prior art structure will be heated by "different " amounts. Therefore, the claimed invention is held to be fully disclosed by Neuman.

Alternatively, the examiner's position is that one of ordinary skill in the metallurgical arts seeks to minimize the amounts of heat necessary to achieve a desired result in a heat treatment process, i.e. to minimize the amount of heat produced and the amount of energy consumed in a given process. Therefore it would have been considered an obvious expedient by one of ordinary skill in the art to only treat certain desired portions of a metal in a prior art heat treatment process, such as that of Neuman. Thus, at a minimum, the disclosure of Neuman is held to create a prima facie case of obviousness of the presently claimed invention.

3. In a response filed February 16, 2005, Applicant alleges that the "mounting" as presently claimed is distinct from the prior art process, and/or that the induction heating of Neuman would be uniform as opposed to the "different" limitations set forth in the instant claims. Applicant's arguments have been carefully considered, but are not persuasive of patentability because:

a) Regardless of how many individual steps Neuman performs in order to obtain the disclosed conductive pads on a circuit board, no patentable distinction is seen between this aspect of the Neuman process and the mounting step as recited in the process as presently claimed.

b) While nothing in Neuman specifically refers to differential heating, the examiner's position is that the treatment performed in the prior art would, in fact, treat portions of the treated material "different" in a manner that is in accord with the instant claims, as set forth in the rejection, *supra*.

4. Claims 4-12, 14, 15, 17, 18, 30, 31, 34 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not disclose or suggest treating to result in the properties defined in claims 4, 17, 30, 31, 34 or 35, and does not disclose treating under the conditions as defined in claims 5-12, 14, 15 and 18.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (571) 272-1252. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (571) 272-1244. Effective October 1, 2003, all patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


GEORGE WYSZOMIERSKI
PRIMARY EXAMINER
GROUP 1700

GPW
April 4, 2005